

WHAT IS CLAIMED IS:

1. A minute pitch measuring method comprising:

applying an electron beam to the surface of a sample while moving the sample relatively in a measuring direction; and

5 acquiring an electronic signal from the surface of the sample to measure a minute pitch of said sample.

2. The minute pitch measuring method according to claim 1, further comprising:

generating a sampling pulse from the measured electronic  
10 signal; and

measuring the minute pitch of said sample from an interval at a rising position or falling position of the sampling pulse.

3. The minute pitch measuring method according to claim 1, wherein the minute pitch is a track pitch.

15 4. A minute pitch measuring apparatus comprising:  
an electron beam radiating mechanism for radiating an electron beam to the surface of a sample;

a sample moving unit for moving said sample in a measuring direction relatively to the electron beam radiating mechanism;

20 an electron detector for detecting an electron from the surface of the sample; and

a calculating unit for calculating a minute pitch from an electronic signal detected by the electron detector and the position of the sample.

25 5. The minute pitch measuring apparatus according to

claim 4, wherein the minute pitch is a track pitch.

6. The minute pitch measuring apparatus according to claim 4, wherein the electron beam radiating mechanism comprises a focus adjusting mechanism for adjusting a focus of the electron beam based on a measurement result of measuring the distance to the surface of the sample.

7. The minute pitch measuring apparatus according to claim 4, wherein the electron beam radiating mechanism comprises a fast deflector for deflecting the electron beam.

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